

CLAIMS

1.-electronic key and lock among those used for the opening  
of systems of closing, characterized because both the key  
5 (1) and the lock (2) are electronically controlled, acting  
on electromechanical means of opening (7), both the key (1)  
and the lock (2) being encapsulated in plastic and the key  
having means of emitting and code storage, while the lock  
has some means for storing the code that is read and means  
10 for comparing the codes.

2.- Electronic key and lock according to claim 1,  
characterized in that the key has a LED diode (3) emitter  
of the code recorded on some recording device (4), having a  
15 number of metallic contacts (5), through which it receives  
the power supply and the signal that triggers the emission  
of the code recorded in the recording device (5), in  
addition it has a connector (6) for external connection  
through which the recording of the codes is undertaken.

20 3.- Electronic key and lock according to claim 1,  
characterized in that the lock (2) has a receiving diode  
(9), for the reception of the opening code, it also has  
some means for storing the code that is read (11) and means  
25 for comparing the codes (12) where the recorded codes are  
held and the comparison with the codes that have been read  
is undertaken. Furthermore it has an connector (10) for  
external connection, through which the recording of the  
lock codes is undertaken, it also has a number of contacts  
30 (8) arranged opposite the contacts (5) of the key (1), and  
through which the electric power from a battery (13) is  
supplied.

35 4.- Electronic key and lock according to claim 1,  
characterized because the several codes can be recorded on

the means of comparison (12) one corresponding with the actual opening code and another corresponding to the code of the master key.

5     5.- Electronic key and lock according to claim 1, characterized in that the recording of the lock (2) codes can be carried out by means of a recording device connected to a personal computer, or remotely through the external external connection connector.

10

6.- Electronic key and lock according to claim 1, characterized because the emitting (3) y receiving doides (8) can be laser diodes.

15

7.- Electronic key and lock according to claim 1, characterized in that the lock has some means for storing the code that is read and means for comparing the codes, while the lock has some means for storing the code that is to be emitted, as well as means for emitting said codes.

20

8.- Electronic key and lock according to claim 1, characterized in that the operational principle in which they are based is applicable to the credit card operation, likewise to any opening system, or access based on cards, 25 where the card functions as an electronic key and the cash dispenser or the door accessed, as an electronic lock.

30

9.- Operating procedure for the key and lock previously described, characterized in that for the opening process, first the key (1) is introduced into the lock (2), the contacts (5) and (8) entering in contact, triggering the emission of the opening code recorded in the key, based on a binary sequence at a determined frequency coinciding with the frequency of the lock (2), afterwards the signal 35 emitted by the LED diode (3) is captured by the receiving

diode (9), stored in some means of storage (11) and compared in some means of comparison (12), in order to proceed to act on the electromechanical opening and closing devices.